

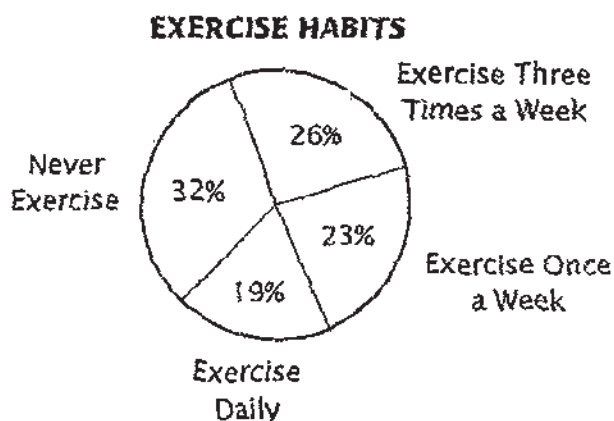
**Missouri Assessment Program  
Spring 2004**

**Mathematics**

**Anchor Pages for Released Items**

**Grade 10**

- 9 As part of the project, the class surveyed the exercise habits of 600 people. The circle graph below shows the results of the survey.



Of the 600 people who completed the survey, how many exercise *at least* once a week? Provide the work that shows how you arrived at your answer.

→ 68%       $(600 \times .68 = 408)$

408 people

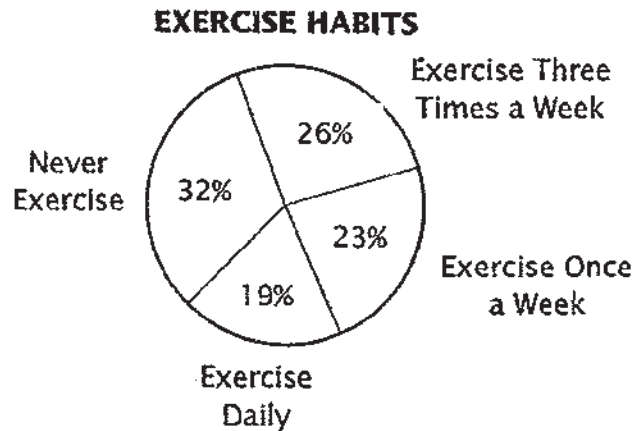
$26\% + 19\% + 23\% = 68\%$

**000101**

**10A-1-9-1**

Missouri Math Operational 2004  
Grade 10  
Session 1 Item 9  
Score: 2 Anchor  
>Correct process  
>Correct answer

- 9** As part of the project, the class surveyed the exercise habits of 600 people. The circle graph below shows the results of the survey.



Of the 600 people who completed the survey, how many exercise *at least* once a week? Provide the work that shows how you arrived at your answer.

408

$$600 - 32\%$$

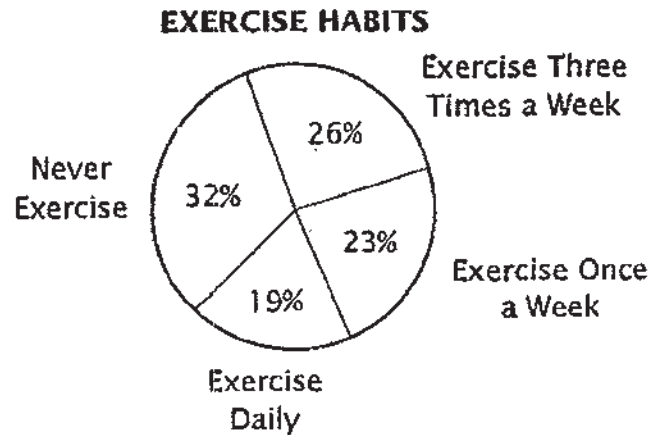
**000102**

**10A-1-9-2**

Missouri Math Operational 2004  
Grade 10  
Session 1 Item 9  
Score: 1 Anchor  
>Incomplete process  
>Correct answer

9

As part of the project, the class surveyed the exercise habits of 600 people. The circle graph below shows the results of the survey.



Of the 600 people who completed the survey, how many exercise *at least* once a week? Provide the work that shows how you arrived at your answer.

$$.23 \cdot 600 = 138$$

**000103**

**10A-1-9-3**

Missouri Math Operational 2004  
Grade 10  
Session 1 Item 9  
Score: 0 Anchor  
>Incorrect process  
>Incorrect answer

- 8** A landscaper is counting the plants in five different areas of a garden. The chart below shows the landscaper's findings.

**PETUNIAS FOUND IN GARDEN**

Area	Total Number of Plants in Area	Findings	Number of Petunias in Area
A	30	$\frac{1}{6}$ of the plants are petunias	5
B	20	$\frac{7}{10}$ of the plants are petunias	14
C	50	30% of the plants are petunias	15
D	40	0.40 of the plants are petunias	16
E	30	$\frac{5}{15}$ of the plants are petunias	10

In the chart, record the number of petunias in each area. Which area has the largest number of petunias? In the space below, provide the work that shows how you arrived at your answer.

Area D has the largest number of petunias

$$A = 30 \left( \frac{1}{6} \right) = 5$$

$$B = 20 \left( \frac{7}{10} \right) = 14$$

$$C = 50 (30\%) = 15$$

$$D = 40 (.40) = 16$$

$$E = 30 \left( \frac{5}{15} \right) = 10$$

**10A-2-8-1**

Missouri Math Operational 2004  
Grade 10  
Session 2 Item 8  
Score: 2 Anchor  
>Correct process  
>Correct answer

**010201**

- 8** A landscaper is counting the plants in five different areas of a garden. The chart below shows the landscaper's findings.

**PETUNIAS FOUND IN GARDEN**

Area	Total Number of Plants in Area	Findings	Number of Petunias in Area
A	30	$\frac{1}{6}$ of the plants are petunias	5
B	20	$\frac{7}{10}$ of the plants are petunias	14
C	50	30% of the plants are petunias	15
D	40	0.40 of the plants are petunias	16
E	30	$\frac{5}{15}$ of the plants are petunias	10

In the chart, record the number of petunias in each area. Which area has the largest number of petunias? In the space below, provide the work that shows how you arrived at your answer.

area D has the largest number of petunias

$$\begin{array}{r} 40 \\ \times 0.4 \\ \hline 16.0 \end{array}$$

**10A-2-8-2**

Missouri Math Operational 2004  
Grade 10  
Session 2 Item 8  
Score: 1 Anchor  
>Incomplete process  
>Correct answer

**010249**

8

A landscaper is counting the plants in five different areas of a garden. The chart below shows the landscaper's findings.

**PETUNIAS FOUND IN GARDEN**

Area	Total Number of Plants in Area	Findings	Number of Petunias in Area
A	30	$\frac{1}{6}$ of the plants are petunias	$\frac{1}{180}$
B	20	$\frac{7}{10}$ of the plants are petunias	$\frac{7}{200}$
C	50	30% of the plants are petunias	.006
D	40	0.40 of the plants are petunias	.01
E	30	$\frac{5}{15}$ of the plants are petunias	$\frac{1}{90}$

In the chart, record the number of petunias in each area. Which area has the largest number of petunias? In the space below, provide the work that shows how you arrived at your answer.

I divided the findings of petunias by the total number of plants in the area

**10-2-8-3**

Missouri Math Operational 2004  
Grade 10  
Session 2 Item 8  
Score: 0 Anchor  
>Incorrect process  
>No answer indicated

**010203**